

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 09/539,287 Confirmation No. 8250
Applicant : David Pedersen et al.
Filed : March 30, 2000
TC/A.U. : 2827
Examiner : Jeremy C. Norris

Docket No. : P48D1-US

Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**PETITION TO WITHDRAW HOLDING OF ABANDONMENT
BASED ON FAILURE TO RECEIVE OFFICE ACTION**

To Whom It May Concern:

The Director is hereby petitioned under 37 C.F.R. § 1.181 to withdraw the holding of abandonment in the above-referenced application and to re-mail the Office Action dated July 11, 2003. In support of this petition, the undersigned states:

(1) Since filing a Request For Status dated February 12, 2003, receiving a response from the U.S. Patent and Trademark Office (the "USPTO") dated April 18, 2003 indicating that the application was in the "Phoenix program," and filing an Information Disclosure Statement dated May 6, 2003, Applicants have not received a communication from the USPTO in the above-identified patent application. Applicants have, however, obtained from PAIR, a copy of an Office Action dated July 11, 2003 (hereinafter "the Office Action") and a Notice of Abandonment dated February 19, 2004 (hereinafter "the Notice of Abandonment"). (A copy of the Office Action with what is believed to be the envelope in which the Office Action was returned to the USPTO is attached hereto as Exhibit A, and copy of the Notice of Abandonment with what is believed to be the envelope in which the Notice of Abandonment was returned to the USPTO is attached hereto as Exhibit B.) Applicants did not, however, received either the Office Action or the Notice of Abandonment because both the Office Action and the Notice of

Abandonment were mailed to an old address and were returned to the USPTO by the US Postal Service as "undeliverable." (See last page of Exhibit A and last page of Exhibit B.)

(2) Applicants had changed the old address and the USPTO had acknowledged the change of address nearly 1.5 years prior to the mailing date of the Office Action and more than 2 years prior to the mailing date of the Notice of Abandonment. Specifically, on October 29, 2001 Applicants sent a communication to the Electronics Business Center stating that they were moving their offices. Included in the communication was a Customer Number Update form, giving the new address and the applications associated with that address. (A copy of that communication and Customer Number Update form is attached as Exhibit C.) The above referenced application was listed in row 96 of the Customer Number Update form. (See attached Exhibit C.) On January 28, 2002 a Request for Customer Number Data Change form was filed. (A copy of the Customer Number Data Change form is attached as Exhibit D.) Both Exhibit C and D indicate that the correspondence address should be:

FormFactor, INC.
Legal Department
2140 Research Drive
Livermore, CA 94550

Applicants received a Notice of Customer Number Record Change dated January 30, 2002 indicating that the USPTO made the above discussed change in correspondence address. (A copy of the Notice of Customer Number Record Change is attached as Exhibit E.) However, the foregoing new address was not used by the USPTO; rather, the USPTO continued to use the old address.

(c) As discussed above, the Office Action, dated July 11, 2003, was nevertheless sent to the old address (FormFactor, INC., 5666 LaRibera St., Livermore, CA 94550), and was in fact returned to the USPTO as "undeliverable." (See last page of Exhibit A.) The Notice of Abandonment, dated February 19, 2004, was also sent to the old address (FormFactor, INC., 5666 LaRibera St., Livermore, CA 94550) and was also returned to the USPTO as "undeliverable." (See last page of Exhibit B.) Applicants thus

did not receive either the Office Action or the Notice of Abandonment.

(d) A search of the file jacket and the docket record indicates that neither the Office Action nor the Notice of Abandonment was received by Applicants. A copy of the docket record where receipt of the Office Action and the Notice of Abandonment would have been docketed had the Office Action and the Notice of Abandonment been received by Applicants is attached as the second page of Exhibit F. The attached docket record shows all entries in Applicants' docket for the above-referenced patent application between July 10, 2003, and May 31, 2004. (See the Statement Of Personal Knowledge that is the first page of Exhibit F.)

In consideration of these submissions, it is respectfully requested that the holding of abandonment be withdrawn, and the Office Action dated July 11, 2003 be re-mailed.

Although Applicants believe that no fee is due, Applicants hereby authorize the Director to charge any fee deemed to be required for acceptance and processing of this paper to Deposit Account No. 50-0843 (order no. 12439-0270).

Respectfully submitted,

Date: May 4, 2007

By /N. Kenneth Burraston/
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Exhibit A



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
700 East 14th
Alexandria, Virginia 22313-1400
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/539,287	03/30/2000	David V. Pedersen	P48D1-US	8250

7590 07/11/2003
David Larwood
FormFactor INC
5666 LaRibera Street
Livermore, CA 94550

EXAMINER

NORRIS, JEREMY C

ART UNIT

PAPER NUMBER

2827

DATE MAILED: 07/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

TECHNICAL CENTER 2000

Office Action Summary

Application No.

09/539,287

Applicant(s)

PEDERSEN ET AL.

Examiner

Jeremy C. Norris

Art Unit

2827

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41, 43-46, 49, 54, 55, 57-60 and 65-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41, 43-46, 49, 54, 55, 57-60 and 65-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Applicant's Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5, 14. 6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8 March 2002 has been entered.

Drawings

The drawings are objected to because the sectional views are not properly cross-hatched (see MPEP 608.02). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 44, 45, 55, 65, and 66 are rejected under 35 U.S.C. 102(b) as being anticipated by US 3,383,564 (hereafter Lalmond).

Lalmond discloses, referring to figure 3-5, a electronic component comprising a substrate (31) including a conductive area (34); masking material (37) formed on said substrate, said masking material patterned to form an opening (40) corresponding to at least a portion of said conductive area and a main body portion; conductive material (60) deposited on said masking material within said opening and on said main body portion, said conductive material composing a contact structure comprising a base region electrically connected to said conductive area and formed within said opening and a main body region formed on said main body portion of said masking material, said main body region being integrally formed with said base region and displaced away from said substrate [claim 65], wherein at least a portion of the main body region is displaced from the substrate by a distance of between about 5 and 200 mils (see col. 4, lines 20-50) [claim 44], wherein at least a portion of the main body region is displaced from the substrate by a distance of between about 2 and 8 mils (see col. 4, lines 20-50) [claim 45], wherein the conductive material comprises a material selected from the group consisting of nickel, copper, cobalt, iron, gold, silver, elements of the platinum group, noble metals semi-noble metals, elements of the palladium group, tungsten, and molybdenum (see col. 5, lines 10-15) [claim 55], wherein said masking material comprises a plurality of masking layers (37, 38, 42) [claim 66].

Claims 43, 46, 57-59, and 67-70 are rejected under 35 U.S.C. 102(b) as being anticipated by US 3,846,166 (hereafter Saiki).

Saiki discloses, referring to figure 1c, a electronic component comprising a substrate (11) including a conductive area (12); masking material (13) formed on said substrate, said masking material patterned to form an opening (17, see figure 1b) corresponding to at least a portion of said conductive area and a main body portion; conductive material (18) deposited on said masking material within said opening and on said main body portion, said conductive material composing a contact structure comprising a base region electrically connected to said conductive area and formed within said opening and a main body region formed on said main body portion of said masking material, said main body region being integrally formed with said base region and displaced away from said substrate [claim 65], wherein the main body region is approximately parallel to a surface of the electronic component [claim 43], wherein said contact structure further comprises a sloped region disposed between the base region and the main body region [claim 46], wherein the substrate comprises a semiconductor device [claims 57, 59] that has been singulated from a wafer (see col. 5, lines 60-70) [claim 58], wherein said opening is tapered [claim 67], further comprising a terminal on a surface of said substrate [claim 68], said terminal being electrically connected to said conductive area [claim 69].

Similarly, Saiki discloses, referring to figure 1c, an electronic component comprising: a substrate (11) including at least one conductive element; conductive means (12) for providing an electrical connection with at least one of said conductive

elements of said substrate; masking means (13) for forming a patterned mold comprising an opening (17) corresponding to at least a portion of said conductive means and a main body portion; contact means (18) for providing an electrical connection between said conductive means and a point displaced from said substrate, said contact means formed of a conductive material integrally deposited on said masking material means within said opening and on said main body portion, said contact means comprising: a base region formed on said conductive means within said opening, and a main body region formed on said main body portion of said masking means, said main body region being integrally formed with said base region and displaced away from said substrate [claim 70].

Claims 43, 46, 65, and 67-70 are rejected under 35 U.S.C. 102(e) as being anticipated by US 5,436,411 (hereafter Pasch).

Pasch discloses, referring to figure 1f, a electronic component comprising a substrate (104) including a conductive area (108); masking material (110) formed on said substrate, said masking material patterned to form an opening (112) corresponding to at least a portion of said conductive area and a main body portion; conductive material (114) deposited on said masking material within said opening and on said main body portion, said conductive material composing a contact structure comprising a base region electrically connected to said conductive area and formed within said opening and a main body region formed on said main body portion of said masking material, said main body region being integrally formed with said base region and displaced away

from said substrate [claim 65], wherein the main body region is approximately parallel to a surface of the electronic component [claim 43], wherein said contact structure further comprises a sloped region (114a) disposed between the base region and the main body region [claim 46], wherein said opening is tapered [claim 67], further comprising a terminal on a surface of said substrate [claim 68], said terminal being electrically connected to said conductive area [claim 69].

Moreover, Pasch discloses, referring to figure 2f, an electronic component comprising: a substrate (204) including at least one conductive element (206); conductive means (208) for providing an electrical connection with at least one of said conductive elements of said substrate; masking means (210) for forming a patterned mold comprising an opening (212) corresponding to at least a portion of said conductive means and a main body portion; contact means (214) for providing an electrical connection between said conductive means and a point displaced from said substrate, said contact means formed of a conductive material integrally deposited on said masking material means within said opening and on said main body portion, said contact means comprising: a base region formed on said conductive means within said opening, and a main body region formed on said main body portion of said masking means, said main body region being integrally formed with said base region and displaced away from said substrate [claim 70].

Claims 41 and 65 are rejected under 35 U.S.C. 102(e) as being anticipated by US 5,461,775 (hereafter Tanabe).

Tanabe discloses, referring to figure 1, a electronic component comprising a substrate (1) including a conductive area (2); masking material (3) formed on said substrate, said masking material patterned to form an opening corresponding to at least a portion of said conductive area and a main body portion; conductive material (4) deposited on said masking material within said opening and on said main body portion, said conductive material composing a contact structure comprising a base region electrically connected to said conductive area and formed within said opening and a main body region formed on said main body portion of said masking material, said main body region being integrally formed with said base region and displaced away from said substrate [claim 65], wherein the main body region comprises a curved portion [claim 41].

Claims 41, 60 and 65 are rejected under 35 U.S.C. 102(e) as being anticipated by US 4,436,766 (hereafter Williams).

Williams discloses, referring to figure 1, a electronic component comprising a substrate (11) including a conductive area (13); masking material (14) formed on said substrate, said masking material patterned to form an opening corresponding to at least a portion of said conductive area and a main body portion; conductive material (20) deposited on said masking material within said opening and on said main body portion, said conductive material composing a contact structure comprising a base region (20a) electrically connected to said conductive area and formed within said opening and a main body region (20c) formed on said main body portion of said masking material, said

main body region being integrally formed with said base region and displaced away from said substrate [claim 65], wherein the main body region comprises a curved portion [claim: 11], further comprising a separate tip structure (20L) joined permanently to the contact structure [claim 60].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pasch. Pasch discloses the claimed invention as described above with respect to claim 46, except Pasch does not specifically state that the sloped region has an average angle of between about 60 and about 75 degrees. However, it would have been obvious, to one having ordinary skill in the art, at the time of invention, to form the sloped region in such

a manner since Pasch teaches that it is well known in the art to form slopes from between ninety degrees to thirty degrees (see col. 2, lines 30-40). Therefore, it would have been an obvious matter of design choice to one having ordinary skill in the art to select the 60 to 75 degree range. Furthermore, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Moreover, it has been held that more than a mere change of form is necessary for patentability. *Span-Deck, Inc v. Fab-Con, Inc.* (CA 8, 1982) 215 USPQ 835.

Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lalmond in view of US 5,416,278 (hereafter Ostrem).

Lalmond discloses the claimed invention as described above with respect to claim 65 except Lalmond does not specifically state that the conductive material comprises nickel. However, it would have been obvious, to one having ordinary skill in the art, at the time of invention, to form the conductive material of nickel instead of the copper disclosed in Lalmond since it is well known in the art to substitute nickel for copper as evidenced by Ostrem (see col. 1, line 60 – col. 2, line 5). Moreover, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Response to Arguments

Applicant's arguments with respect to claims 41, 43-46, 49, 54, 55, 57-60, and 65-70 have been considered but are moot in view of the new ground(s) of rejection.

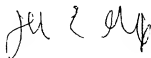
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy C. Norris whose telephone number is 703-306-5737. The examiner can normally be reached on Mon.-Th., 9AM - 6:30 PM and alt. Fri. 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on 703-305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-0725 for regular communications and 703-308-0725 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JCSN
June 24, 2003



DAVID E. GRAYBILL
PRIMARY EXAMINER

Notice of References Cited	Application/Control No. 09/539,287	Applicant(s)/Patent Under Reexamination PEDERSEN ET AL.	
	Examiner Jeremy C. Norris	Art Unit 2827	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-3,383,564	05-1968	Lalmond et al.	174/254
	B	US-3,846,166	11-1974	Saiki et al.	427/99
	C	US-4,436,766	03-1984	Williams, Ralph E.	427/96
	D	US-5,416,278	05-1995	Ostrem et al.	174/263
	E	US-5,436,411	07-1995	Pasch, Nicholas F.	174/261
	F	US-5,461,775	10-1995	Tanabe et al.	29/840
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



Modified Form PTO/SB/08A

Substitute for form P48D1-01		Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/539,287
		Filing Date	March 30, 2000
		First Named Inventor	Pedersen et al.
		Group Art Unit	2841
		Examiner Name	Q. Vu
		Attorney Docket No.	P48D1-US
Sheet	1	of	2

U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant	Publication Date
		Number	Kind Code		
JEN	1	2002/19152	A1	Eldridge et al.	2/14/2002
	2	5070297		Kwon et al.	12/3/1991
	3	5172050		Swapp	12/15/1992
	4	5177438		Littlebury et al.	6/5/1993
	5	5191708		Kasukabe et al.	3/9/1993
	6	5391521		Kim	2/21/1995
	7	5455390		DiStefano et al.	
	8	5465611		Ruf et al.	11/14/1995
	9	5476211		Khandros	12/19/1995
	10	5476818		Yanof et al.	12/19/1995
	11	5477611		Sweis et al.	12/26/1995
	12	5495667		Farnworth et al.	3/5/1996
	13	5513430		Yanof et al.	5/7/1996
	14	5666190		Quate et al.	9/9/1997
	15	5828226		Higgins et al.	10/27/1998
	16	5897326		Eldridge et al.	4/27/1999
	17	5994152		Khandros et al.	11/30/1999
	18	6014032		Maddix et al.	1/1/2000
	19	6059982		Palagonia et al.	5/9/2000
	20	6064213		Khandros et al.	5/16/2000
	21	6184053		Eldridge et al.	2/6/2001

Examiner Signature	Jeremy Norris	Date Considered	6-24-03
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.



Modified Form PTO/SB/08A

Substitute for form 1449A/PTO				Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	09/539,287
				Filing Date	March 30, 2000
				First Named Inventor	Pedersen et al.
				Group Art Unit	2841
				Examiner Name	Q. Vu
Sheet	2	of	2	Attorney Docket No.	P48D1-US

FOREIGN PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document Office ²	Number ²	Kind Code ²	Name of Patentee or Applicant	Publication Date
22	CH	661129	A5			6/30/1987
23	JP	7-021968			w/ English abstract	1/24/1995
24	WO	96/02068			DiStefano et al.	1/25/1996
25	WO	97/43653			Khandros et al.	11/20/1997

OTHER PRIOR ART - NONPATENT LITERATURE DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published				T ²
26		ABOLAFIA, "Tapered Vias In A Photosensitive Dielectric Film," IBM Technical Disclosure Bulletin, vol. 21 no. 12 (May 1979), pp. 4787				
27		"Robust Method Using Simple Unit Processes For Thin Film Cu-Polyimide Packaging Structures," IBM Technical Disclosure Bulletin, vol. 34 no. 10A (March 1992), pp. 368-69				
28		KONG et al., "Integrated Electrostatically Resonant Scan Tip For An Atomic Force Microscope," Journal of Vacuum Science & Technology, Vol. 11 No. 3 (May/June 1993), pp. 634-641				
29		"Thin Film Substrate For Wire Bonding," IBM Technical Disclosure Bulletin, vol. 32 No. 10A (March 1990), pp. 80-81				

Examiner Signature	<i>Geary Norris</i>	Date Considered	6-24-03
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Form PTO/SB/08A

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete If Known

Application Number	09/539,287
Filing Date	March 30, 2000
First Named Inventor	David V. Pedersen et al.
Group Art Unit	2841
Examiner Name	Q. Vu
Attorney Docket No.	P48D1-US

Sheet	1	of	1	Attorney Docket No.	P48D1-US
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U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	Foreign Patent Document Office ² Number ³ Kind Code ⁴		Name of Patentee or Applicant	Publication Date	Relevant Portions	T ⁵
YCN	1.	JP	A 8-276597	Canon K.K.	10/22/96		
	2.	JP	A 7-333232	Canon K.K.	12/22/95		
	3.	JP	A 9-27521	Hewlett-Packard Co.	1/28/97		
	4.	WO	96/15459	FormFactor, Inc.	5/22/96		
7	5.	WO	95/14314	FormFactor, Inc.	5/26/95		

Examiner Signature	Tereng Morris	Date Considered	6-24-03
-----------------------	---------------	--------------------	---------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enier Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

The United States Patent and Trademark Office has changed certain mailing addresses!

Effective May 1, 2003

Use the address provided in this flyer after May 1, 2003 for any correspondence with the United States Patent and Trademark Office (USPTO) in patent-related matters to organizations reporting to the Commissioner for Patents.

DO NOT USE the Washington DC 20231 and P.O. Box 2327 Arlington, VA 22202 addresses after May 1, 2003 for any correspondence with the USPTO even if these old addresses are indicated in the accompanying Office action or Notice or in any other action, notice, material, form, instruction or other information.

Correspondence in patent-related matters to organizations reporting to the Commissioner for Patents must now be addressed to:



**Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450**



Special Mail Stop designations to replace Special Box designations

Also effective May 1, 2003, the USPTO is changing the special Box designations for Patents and Trademarks to corresponding Mail Stop designations (e.g., "Box 4" will now be "Mail Stop 4").

For further information, see *Correspondence with the United States Patent and Trademark Office*, 68 Fed. Reg. 14332 (March 25, 2003). A copy of the *Federal Register* notice is available on the USPTO's web site at <http://www.uspto.gov/web/menu/current.html#register>

A listing of specific USPTO mailing addresses (See Patents – specific) will be available on the USPTO's web site on April 15, 2003 at <http://www.uspto.gov/main/contacts.htm>

Persons filing correspondence with the Office should check the rules of practice, the Official Gazette, or the Office's Internet Web site (www.uspto.gov) to determine the appropriate address and Mail Stop Designation (if applicable) for all correspondence being delivered to the USPTO via the United States Postal Service (USPS).

Questions regarding the content of this flyer should be directed to the Inventor Assistance Center at (703) 308-4357 or toll-free at 1-800-786-9199.

**REVISED AMENDMENT PRACTICE: 37 CFR 1.121 CHANGED
COMPLIANCE IS MANDATORY - Effective Date: July 30, 2003**

All amendments filed on or after the effective date noted above must comply with revised 37 CFR 1.121. See Final Rule: **Changes To Implement Electronic Maintenance of Official Patent Application Records** (68 Fed. Reg. 38611 (June 30, 2003)), posted on the Office's website at: <http://www.uspto.gov/web/patents/ifw/> with related information. The amendment practice set forth in revised 37 CFR 1.121, and described below, replaces the voluntary revised amendment format available to applicants since February 2003. **NOTE: STRICT COMPLIANCE WITH THE REVISED 37 CFR 1.121 IS REQUIRED AS OF THE EFFECTIVE DATE (July 30, 2003).** The Office will notify applicants of amendments that are not accepted because they do not comply with revised 37 CFR 1.121 via a Notice of Non-Compliant Amendment. See MPEP 714.03 (Rev. 1, Feb. 2003). The non-compliant section(s) will have to be corrected and the entire corrected section(s) resubmitted within a set period.

Bold underlined italic font has been used below to highlight the major differences between the revised 37 CFR 1.121 and the voluntary revised amendment format that applicants could use since February, 2003.

Note: The amendment practice for reissues and reexamination proceedings, except for drawings, has not changed.

REVISED AMENDMENT PRACTICE

I. Begin each section of an amendment document on a separate sheet:

Each section of an amendment document (e.g., Specification Amendments, Claim Amendments, Drawing Amendments, and Remarks) must begin on a separate sheet. Starting each separate section on a new page will facilitate the process of separately indexing and scanning each section of an amendment document for placement in an image file wrapper.

II. Two versions of amended part(s) no longer required:

37 CFR 1.121 has been revised to no longer require two versions (a clean version and a marked up version) of each replacement paragraph or section, or amended claim. Note, however, the requirements for a clean version and a marked up version for substitute specifications under 37 CFR 1.125 have been retained.

A) Amendments to the claims:

Each amendment document that includes a change to an existing claim, cancellation of a claim or submission of a new claim, **must include a complete listing** of all claims in the application. After each claim number in the listing, the status must be indicated in a parenthetical expression, and **the text of each pending claim** (with markings to show current changes) must be presented. The claims in the listing will replace all prior claims in the application.

- (1) The current status of all of the claims in the application, including any previously canceled, not entered or withdrawn claims, must be given in a parenthetical expression following the claim number using only one of the following seven status identifiers: (original), (currently amended), (canceled), (withdrawn), (new), (previously presented) and (not entered). The text of all pending claims, including withdrawn claims, must be submitted each time any claim is amended. Canceled and not entered claims must be indicated by only the claim number and status, without presenting the text of the claims.
- (2) The text of all claims being currently amended must be presented in the claim listing with markings to indicate the changes that have been made relative to the immediate prior version. The changes in any amended claim must be shown by underlining (for added matter) or strikethrough (for deleted matter) with 2 exceptions: (1) for deletion of five characters or fewer, double brackets may be used (e.g., [leroor]); and (2) if strikethrough cannot be easily perceived (e.g., deletion of the number "4" or certain punctuation marks), double brackets must be used (e.g., [4]). As an alternative to using double brackets, however, extra portions of text may be included before and after text being deleted, all in strikethrough, followed by including and underlining the extra text with the desired change (e.g., number 4 as number 14 as). An accompanying clean version is not required and should not be presented. Only claims of the status "currently amended," and "withdrawn" that are being amended, may include markings.
- (3) The text of pending claims not being currently amended, including withdrawn claims, must be presented in the claim listing in clean version, i.e., without any markings. Any claim text presented in clean version will constitute an assertion that it has not been changed relative to the immediate prior version except to omit markings that may have been present in the immediate prior version of the claims.

- (4) A claim being canceled must be listed in the claim listing with the status identifier "canceled"; the text of the claim must not be presented. Providing an instruction to cancel is optional.
- (5) Any claims added by amendment must be presented in the claim listing with the status identifier "(new)"; the text of the claim must not be underlined.
- (6) All of the claims in the claim listing must be presented in ascending numerical order. Consecutive canceled, or not entered, claims may be aggregated into one statement (e.g., Claims 1 – 5 (canceled)).

Example of listing of claims (use of the word "claim" before the claim number is optional):

- Claims 1-5 (canceled)
- Claim 6 (previously presented): A bucket with a handle.
- Claim 7 (withdrawn): A handle comprising an elongated wire.
- Claim 8 (withdrawn): The handle of claim 7 further comprising a plastic grip.
- Claim 9 (currently amended): A bucket with a green blue handle.
- Claim 10 (original): The bucket of claim 9 wherein the handle is made of wood.
- Claim 11 (canceled)
- Claim 12 (not entered)
- Claim 13 (new): A bucket with plastic sides and bottom.

B) Amendments to the specification:

Amendments to the specification, including the abstract, must be made by presenting a replacement paragraph or section or abstract marked up to show changes made relative to the immediate prior version. An accompanying clean version is not required and should not be presented. Newly added paragraphs or sections, including a new abstract (instead of a replacement abstract), must not be underlined. A replacement or new abstract must be submitted on a separate sheet, 37 CFR 1.72. If a substitute specification is being submitted to incorporate extensive amendments, both a clean version (which will be entered) and a marked up version must be submitted as per 37 CFR 1.125.

The changes in any replacement paragraph or section, or substitute specification must be shown by underlining (for added matter) or strikethrough (for deleted matter) with 2 exceptions: (1) for deletion of five characters or fewer, double brackets may be used (e.g., ||error||); and (2) if strikethrough cannot be easily perceived (e.g., deletion of the number "4" or certain punctuation marks), double brackets must be used (e.g., ||4||). As an alternative to using double brackets, however, extra portions of text may be included before and after text being deleted, all in strikethrough, followed by including and underlining the extra text with the desired change (e.g., number 4 as number 14 as)

C) Amendments to drawing figures:

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment, and may be accompanied by a marked-up copy of one or more of the figures being amended, with annotations. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. Any marked-up (annotated) copy showing changes must be labeled "Annotated Sheet Showing Changes" and accompany the replacement sheet as an appendix to the amendment. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Questions regarding the submission of amendments pursuant to the revised practice set forth in this flyer should be directed to: Elizabeth Dougherty or Gena Jones, Legal Advisors, or Joe Narcavage, Senior Special Projects Examiner, Office of Patent Legal Administration, by e-mail to patent.practice@uspto.gov or by phone at (703) 305-1616.

**NOTIFICATION OF REQUESTED NEW FORMAT FOR AMENDMENTS AND/OR RESPONSES FILED
IN ART UNITS 1634, 2827, AND 2834**

The United States Patent and Trademark Office (USPTO) is currently conducting a prototype of electronic application processing and examination in Art Units 1634, 2827, and 2834. To facilitate the prototype, the following changes in format for Amendments and or Responses filed in those Art Units are requested.

Requested Format of Amendments and Responses during the prototype.

Each section of an Amendment and/or Response (e.g., Claim Amendments, Specification Amendments, Remarks) should begin on a separate sheet to facilitate separate indexing and scanning of the document. *For example*, in an Amendment containing a.) introductory comments, b.) amendments to the claims, c.) amendments to the specification, and d.) remarks, each of these sections should begin on a separate sheet. **For each amendment filed in Art Units 1634, 2827, and 2834, the requirement to provide two sets of claims (a clean version and a marked up version), as set forth in 37 CFR 1.121(c), will be waived where the following format is employed.**

Each amendment that includes a change to an existing claim, or submission of a new claim shall be made by submitting a summary document with the status of all claims and the text of all pending claims as follows:

- (1) The status of all of the claims in the application, including any previously canceled or withdrawn claims, must be summarized in each amendment document. Status is indicated by a parenthetical expression following the claim number (e.g. (original), (currently amended), (previously amended), (canceled), (withdrawn), or (new)). The text of all pending claims must be submitted each time any claim is amended. Canceled and withdrawn claims may be indicated by only the claim number and status.
- (2) All claims being currently amended must be submitted with markings to indicate the changes that have been made. The changes in any amended claim may be shown by ~~strikethrough~~ (for deleted matter) or underlining (for added matter), or by any equivalent marking system.
- (3) The text of pending claims not being amended must be presented in each amendment document in clean version, i.e., without any markings. Any claim presented in clean version will constitute an assertion that it has not been changed relative to the immediate prior version.
- (4) A claim may be canceled by merely providing an instruction to cancel. Any claims added by amendment must be indicated as (new).
- (5) All of the claims in each amendment paper must be presented in ascending numerical order. Consecutive canceled or withdrawn claims may be aggregated into one statement (e.g. Claims 1 – 5 (canceled)).

Amendments to the specification are performed in the conventional manner (37 CFR 1.121(b)).

Patent Copies

Additionally, applicants and practitioners will no longer be required to provide copies of U.S. Patents and Published U.S. Patent Applications cited in any Information Disclosure Statement (IDS) submitted to the USPTO during the prototype and in applications assigned to the three art units. It is requested that eIDSs be used to file all IDS papers for applications before the prototype Art Units. Similarly, during the prototype, copies of U.S. Patents and Published U.S. Patent Applications cited by an examiner during prosecution of an application will not be provided to applicants in Office actions from these Art Units. These documents are available from the USPTO web site, www.uspto.gov for free download. Cited foreign patents and published applications and non-patent literature will be mailed by conventional processing.

The above requested new format and procedures are applicable during the prototype only to applications assigned to Art Units 1634, 2827, and 2834. Any questions regarding these requirements may be directed to image.processing@uspto.gov or one of the Supervisory Patent Examiners of these Art Units 1634 – Gary.Jones@uspto.gov, 2827 – Dave.Lalibott@uspto.gov or 2834 – Nector.Ramirez@uspto.gov.

Example:

Claims 1-5 (canceled) (Note: consecutive canceled or withdrawn claims may be aggregated)

Claim 6 (withdrawn)

Claim 7 (previously amended): A bucket with a handle.

Claim 8 (currently amended): A bucket with a green blue handle.

Claim 9 (withdrawn)

Claim 10 (original): A bucket with a wooden handle.

Claim 11: (new): A bucket with plastic sides and bottom.

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Exhibit B



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/539,287	03/30/2000	David V. Pedersen	P48D1-US	8250

7590 02/19/2004
David Larwood
FormFactor INC
5666 LaRibera Street
Livermore, CA 94550

EXAMINER

NORRIS, JEREMY C

ART UNIT PAPER NUMBER

2827

DATE MAILED: 02/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Notice of Abandonment

Application No.

09/539,287

Examiner

Jeremy C. Norris

Applicant(s)

PEDERSEN ET AL.

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on 11 July 2003.
- (a) ☐ A reply was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply (including a total extension of time of _____ month(s)) which expired on _____.
- (b) ☐ A proposed reply was received on _____, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection. (A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
- (c) ☐ A reply was received on _____ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
- (d) ☒ No reply has been received.
2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
- (a) ☐ The issue fee and publication fee, if applicable, was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
- (b) ☐ The submitted fee of \$_____ is insufficient. A balance of \$_____ is due.
The issue fee required by 37 CFR 1.18 is \$_____. The publication fee, if required by 37 CFR 1.18(d), is \$_____.
- (c) ☐ The issue fee and publication fee, if applicable, has not been received.
3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
- (a) ☐ Proposed corrected drawings were received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply.
- (b) ☐ No corrected drawings have been received.
4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.
5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.
6. ☐ The decision by the Board of Patent Appeals and Interference rendered on _____ and because the period for seeking court review of the decision has expired and there are no allowed claims.
7. ☒ The reason(s) below:

A call was placed to the office of N. Kenneth Burraston on 3 February 2004 to confirm application status.


KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

Organization To 2800 Bid./Room C24

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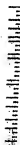


Exhibit C

2140 Research Drive
Livermore, CA 94550
Tel. 925.294.4300
Fax 925.294.8147

P48D1-LS
www.formfactor.com
email: smerkadeau@formfactor.com



FORMFACTOR

October 29, 2001

Box: EBC
U.S. Patent and Trademark Office
Washington, D.C. 20231

ATTENTION: Stacy Fuller

Re: Customer Name: FormFactor, Inc.
Customer No. 27520
Customer Number Update

Dear Ms. Fuller:

We will be moving our offices on November 2, 2001 and therefore need to change the correspondence address assigned to our customer number and correlate our patent application files to our customer number.

We are enclosing the Customer Number Update form, which indicates our new address and lists the patent applications to be related to our customer number, along with a diskette containing an electronic copy of the form.

If you have any questions, please contact our paralegal Michelle White at 925-294-4300 or by email at: mwhite@formfactor.com

Sincerely,

Stuart L. Merkadeau
Vice President, Intellectual Property
Reg. No. 33,262

Enclosures

Exhibit C

	A	B	C	D	E	F	G
1	Customer:	2752u	----- (Six digit Customer Number)				
2					NOTE: Bold X's indicate where data is entered.		
3	FormFactor, Inc.				----- Enter Correspondence Address.		
4	Legal Department				Line 3 firm name		
5	2140 Research Drive				Line 4 street address		
6	Livermore, CA 94550				Line 5 street address or city, state zip		
7	US				Line 6 street address or city, state zip		
8					Line 7 street address or city, state zip		
9					Line 8 street address or city, state zip		
10					Line 9 street address or city, state zip		
11	Rows 10 through 15 are blank, data entry begins in row 16 and is continuous until all application and/or						
12	patent information is entered. No headers or titles are used on subsequent pages.						
13	Patent	Application	Patent	Filing	Correspondence	Practioner of	Fee
14	Number	Number	Date	Date	Address	Record	Address
15	(7 Digits w/o ".")	(8 digit w/o "/" or ".")	mm/dd/yy	mm/dd/yy	yes/no	yes/no	yes/no
16	5476211	8152812	12/19/1995	11/16/1993	Yes		Yes
17	5601740	8573945	2/11/1997	12/18/1995	Yes		Yes
18	5772451	8533584	6/30/1998	10/18/1995	Yes		Yes
19	5773780	8797023	6/30/1998	2/7/1997	Yes		Yes
20	5806181	8789147	9/15/1998	1/24/1997	Yes		Yes
21	5820014	8584981	10/13/1998	1/11/1996	Yes		Yes
22	5829128	8558332	11/3/1998	11/15/1995	Yes		Yes
23	5832601	8839762	11/10/1998	4/15/1997	Yes		Yes
24	5852871	8570230	12/29/1998	12/11/1995	Yes		Yes
25	5864946	8839758	2/2/1999	4/15/1997	Yes		Yes
26	5878486	8839772	3/9/1999	4/15/1997	Yes		Yes
27	5884398	8839760	3/23/1999	4/15/1997	Yes		Yes
28	5897326	8839770	4/27/1999	4/15/1997	Yes		Yes
29	5900738	8735811	5/4/1999	10/21/1996	Yes		Yes
30	5912046	8854203	6/15/1999	5/9/1997	Yes		Yes
31	5917707	8340144	6/29/1999	11/15/1994	Yes		Yes
32	5926951	8735813	7/27/1999	10/21/1996	Yes		Yes
33	5974662	8554902	11/2/1999	11/9/1995	Yes		Yes
34	5983493	8839763	11/16/1999	4/15/1997	Yes		Yes
35	5994152	8788740	11/30/1999	1/24/1997	Yes		Yes
36	5998228	8839759	12/7/1999	4/15/1997	Yes		Yes
37	5998864	8863511	12/7/1999	5/27/1997	Yes		Yes
38	6023103	9106943	2/8/2000	6/30/1998	Yes		Yes
39	6029344	9132843	2/29/2000	8/12/1998	Yes		Yes
40	6032356	8839771	3/7/2000	4/15/1997	Yes		Yes
41	6033935	9108163	3/7/2000	6/30/1998	Yes		Yes
42	6042712	9083328	3/28/2000	5/21/1998	Yes		Yes
43	6043563	8955001	3/28/2000	10/20/1997	Yes		Yes
44	6049976	8457479	4/18/2000	6/1/1995	Yes		Yes
45	6050829	8920255	4/18/2000	8/28/1997	Yes		Yes
46	6064213	8784862	5/16/2000	1/15/1997	Yes		Yes
47	6090261	9083206	7/18/2000	5/21/1998	Yes		Yes
48	6110823	9089817	8/29/2000	6/3/1998	Yes		Yes
49	6150186	9217589	11/21/2000	12/22/1998	Yes		Yes
50	6168974	9499963	1/2/2001	2/8/2000	Yes		Yes
51	6184053	8852152	2/6/2001	5/6/1997	Yes		Yes
52	6184587	8735815	2/6/2001	10/21/1996	Yes		Yes
53	6215196	9536223	4/10/2001	3/27/2000	Yes		Yes
54	6215670	9245779	4/10/2001	2/5/1999	Yes		Yes
55	6232149	9519279	5/15/2001	3/7/2000	Yes		Yes
56	6242803	8735810	6/5/2001	10/21/1996	Yes		Yes
57	6246247	9156957	6/12/2001	9/18/1998	Yes		Yes
58	6252175	9397779	6/26/2001	9/16/1999	Yes		Yes
59	6255126	9205023	7/3/2001	12/2/1998	Yes		Yes

Exhibit C

	A	B	C	D	E	F	G
60	6268015	9205022	7/31/2001	12/2/1998	Yes		Yes
61	6274823	8735812	8/14/2001	10/21/1996	Yes		Yes
62	6279227	8735809	8/28/2001	10/21/1996	Yes		Yes
63	6307161	8926898	10/23/2001	9/10/1997	Yes		Yes
64		8452255		5/26/1995	Yes		Yes
65		8735816		10/21/1996	Yes		Yes
66		8735817		10/21/1996	Yes		Yes
67		8794202		1/24/1997	Yes		Yes
68		8802054		2/18/1997	Yes		Yes
69		8819464		3/17/1997	Yes		Yes
70		8994799		12/19/1997	Yes		Yes
71		9042606		3/16/1998	Yes		Yes
72		9060308		4/14/1998	Yes		Yes
73		9107924		6/30/1998	Yes		Yes
74		9114586		7/13/1998	Yes		Yes
75		9189761		11/10/1998	Yes		Yes
76		9196924		11/19/1998	Yes		Yes
77		9204740		12/2/1998	Yes		Yes
78		9205502		12/4/1998	Yes		Yes
79		9217590		12/22/1998	Yes		Yes
80		9224166		12/31/1998	Yes		Yes
81		9224169		12/31/1998	Yes		Yes
82		9224673		12/31/1998	Yes		Yes
83		9245499		2/5/1999	Yes		Yes
84		9260460		3/1/1999	Yes		Yes
85		9260466		3/1/1999	Yes		Yes
86		9260794		3/1/1999	Yes		Yes
87		9260795		3/1/1999	Yes		Yes
88		9364788		7/30/1999	Yes		Yes
89		9374467		8/13/1999	Yes		Yes
90		9376759		8/17/1999	Yes		Yes
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93		9474789		12/29/1999	Yes		Yes
94		9527931		3/17/2000	Yes		Yes
95		9528064		3/17/2000	Yes		Yes
96		9539287		3/30/1999	Yes		Yes
97		9573489		5/16/2000	Yes		Yes
98		9591107		6/9/2000	Yes		Yes
99		9592487		6/8/2000	Yes		Yes
100		9633551		8/7/2000	Yes		Yes
101		9694205		10/20/2000	Yes		Yes
102		9746960		12/21/2000	Yes		Yes
103		9747118		12/21/2000	Yes		Yes
104		9752640		12/29/2000	Yes		Yes
105		9752795		12/29/2000	Yes		Yes
106		9752853		12/29/2000	Yes		Yes
107		9752902		12/29/2000	Yes		Yes
108		9753309		12/29/2000	Yes		Yes
109		9753310		12/29/2000	Yes		Yes
110		9753312		12/29/2000	Yes		Yes
111		9771163		1/29/2001	Yes		Yes
112		9777348		2/5/2001	Yes		Yes
113		9810871		3/16/2001	Yes		Yes
114		9819143		3/27/2001	Yes		Yes
115		9832913		4/10/2001	Yes		Yes
116		9846490		4/30/2001	Yes		Yes
117		9848854		5/4/2001	Yes	Exhibit C	Yes
118		9851566		5/8/2001	Yes		Yes

	A	B	C	D	E	F	G
119		9903798		7/11/2001	Yes		Yes
120		9938789		8/24/2001	Yes		Yes
121		9938895		8/24/2001	Yes		Yes
122		9953666		9/14/2001	Yes		Yes
123		9955258		9/12/2001	Yes		Yes
124							
125							
126	Left or Ctr align	Left or Ctr align	mo/da/yr	mo/da/yr	l, r or c align	l, r, or c align	right align
127							
128							
129	Save as an .XLS spreadsheet (preferably as 4.0). Do not make separate files for each attorney.						
130	Enter patented Designs as: DXXXXXX.						
131	Enter Reexams as: REXXXXX.						
132	Format date fields as: MO/DA/YR . Will display slashes.						
133							
134	We cannot currently accept PCT international applications in this program.						
135	Do not use slashes or commas when entering patent numbers and/or serial numbers.						
136	Submission requirements are set forth in the Official Gazette dated January 7, 1997 on page 1194 OG 4.						
137	The PTO will enter a change in correspondence or fee address or power of attorney in a listed application						
138	or patent only when, at least, one of the following identifiers are provided:						
139							
140	1. the patent number and the corresponding application number;						
141	2. the patent number and the corresponding patent date;						
142	3. the application number and the corresponding filing date;						
143	4. the patent number and the corresponding filing date;						
144	5. the application number and the corresponding patent date.						
145							
146	What happens after we receive the disk?						
147	1. Check to see that your Customer number(s) is/are on file.						
148	Remember, for each file you can request a different Customer number for each correspondence address,						
149	one for correspondence address, a different number for address for practitioner(s) of record, and						
150	another number for fee address, or one number can be used for two of the three or one of the three.						
151	However, you must apply for the numbers before submitting your disk.						
152	2. After confirmation of a valid customer number(s), the data is uploaded to the database on the mainframe.						
153	3. Change of address letters will be generated for each application number and/or patent number accepted.						
154	Acceptance occurs if the number(s) and corresponding date(s) match those in our database. The						
155	letters are filed in the application or patented file with the new Customer Number annotated on the file jacket						
156	4. A 2 part report is also generated. The first part lists application and/or patent numbers not updated for faili						
157	the system edits. You should review information provided, make corrections and submit a new disk with						
158	correct information. Send to box CN, Washington, DC 20231. The 2nd part of the report lists all applicati						
159	updated to reflect the customer number as designated. Please review carefully, paying close attention						
160	to the "OLD" first line of address printed. It is not familiar, it may be that you updated another customers file						
161	with your customer number. Please notify the Patents Electronic Business Center, in writing, of any files r						
162	associated with you or your firm but were updated with your customer number.						
163							
164	Questions: Call Patents Electronic Business Center, 703-305-3020.						
165	E-mail: PAIR.project@USPTO.gov						

Exhibit D

Please type a plus sign (+) inside this box → ☐

PTO/SB/124A (8-96)
Approved for use through 9/30/99. OMB 0651-0035
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Request for Customer Number Data Change

Address to:

Assistant Commissioner for Patents
Box CN
Washington, DC 20231

To the Commissioner of Patents and Trademarks:
Please record the following data changes to **Customer Number:**

Type Customer Number here

27520

Place Customer Number
Bar Code Label here

☒ Please change Correspondence Address to:

Firm or Individual Name	FORMFACTOR, INC.				
Address	LEGAL DEPARTMENT				
Address	2140 RESEARCH DRIVE				
City	LIVERMORE	State	CA	ZIP	94550
Country	US				
Telephone	925-456-3971		Fax	925-294-8147	

☐ Please delete the following practitioner registration number (s) from the Customer Number indicated above:

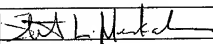
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

☐ Please add the following practitioner registration numbers to the Customer Number indicated above:

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

☐ Additional practitioner registration numbers are listed on supplemental sheet(s) attached hereto

Request Submitted by:

Firm Name (if applicable)	FORMFACTOR, INC.		
Name of Person submitting request	STUART L. MERKADEAU		
Signature			
Telephone Number	925-456-3971	Date	1/28/2002

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box CN, Washington, DC 20231.

Exhibit D

Exhibit E



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

**CUSTOMER
NUMBER:** 27520
**CORRESPONDENCE
ADDRESS:**

FORMFACTOR, INC.
LEGAL DEPARTMENT
2140 RESEARCH DRIVE
LIVERMORE, CA 94550



FAX: 925-294-8147
E-MAIL:

PHONE: 925-456-3971

Date Mailed: 01/30/2002

NOTICE OF CUSTOMER NUMBER RECORD CHANGE

The request to change the information associated with the above-identified Customer Number has been accepted by the Commissioner of Patents and Trademarks.

The Customer Number may be used to identify the correspondence address or "fee address" for, and/or the appointed practitioner(s) in, a United States patent application or patent. The correspondence address and registration numbers indicated on this notice reflect the current correspondence address and registration numbers associated with the above-identified Customer Number.

PRACTITIONER REGISTRATION NUMBER(S) ASSIGNED TO THAT CUSTOMER NUMBER:

33262, 39923.



B.J.

Patents Electronic Business Center
(703) 305-3028

PART 1 - ATTORNEY/APPLICANT COPY

Exhibit E

Exhibit F

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 09/539,287 Confirmation No. 8250
Applicant : David Pedersen et al.
Filed : March 30, 2000
TC/A.U. : 2827
Examiner : Jeremy Norris

Docket No. : P48D1-US

Mail stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

STATEMENT OF PERSONAL KNOWLEDGE

To Whom It May Concern:

I, Michelle White, state that I was employed as a paralegal and intellectual property coordinator by FormFactor, Inc., the assignee of the above-identified patent application, during the time period July 10, 2003 through April 30, 2004, and my duties included maintaining the patent prosecution docket, including the docket for the above-identified patent application. I further state on a personal knowledge basis that the portion of the docket for the above-identified patent application attached hereto is accurate and is where any office actions, notices of abandonment, or other correspondence received between July 10, 2003 and May 31, 2004 from the U.S. Patent and Trademark in the above-identified patent application would have been logged.

Date: May 2, 2007

By: 
Michelle White
Intellectual Property Paralegal

Application/Serial No. 09/539287

Filing Date 3/30/2000

2/4/1998

PFI Reference 48 D1 - US

PTO Status Abandoned

Actions Portal

12/22/2006

Responsible Professional

RSH KB

FFI/Firm

FFI

Enter Date Allowed

Code	Mo	Auto Due Date	Due Date	Action Description	Comments	
AR - Acty		Action Priority	Completed			
PetR - 2			3/9/2007	Petition to Revoke	2/6/07 - NIS sent NKB file history and other supporting documentation from file	Budget
RSH KB		1.0				
Appl	5	3/30/2000	3/30/2000	Application Filed?		Budget
DJL		1	3/30/2000			
FR - 5		3/30/2000	3/30/2000	Expect Filing Receipt		Budget
MW		2.5	6/19/2000			
RevP	1	10/2/2000	10/2/2000	Revocation & POA needed	PC	Budget
SLM		2	10/2/2000			
CoF	3	9/22/2000	9/22/2000	Correct Filing Receipt		Budget
PC MW		3	1/4/2001			
FRco	2	3/4/2001	3/4/2001	Expect Corrected Filing Receipt	2/27/01 - rec'd	Budget
SLM		2.0	2/27/2001			
IDS	3	9/12/2001	9/12/2001	IDS - Refs cited in Foreign Counterpart	PC	Budget
SLM		1.0	9/11/2001			
OA - 3		9/23/2001	9/23/2001	Office Action Response Due W/ 1M	PC	Budget
SLM		1.0	9/24/2001		9/24/01 - KB filed Resp/Amendmt w/ 1 mo EOT	
FOA	3	1/24/2002	2/24/2002	Final OA Response Due - 3 mo w/ 1M	PC (stamped rec'd 3/8/2002)	Budget
SLM KB		1.0	2/25/2002		2/25/02 - KB filed RCE w/ Amend/Resp. & Request	
IDS - 3		3/30/2000	6/30/2000	IDS Due	PC (stamped rec'd 5/8/02)	Budget
MW DJL		1.0	5/1/2002		5/1/2002 - IDS and Notice of Related Applications	
RCE	3	5/24/2002	5/24/2002	RCE Suspension - FINAL	PC (stamped rec'd 5/8/02)	Budget
SLM		1.0	5/1/2002		5/1/2002 - IDS and Notice of Related Applications	
Statu	24	11/10/2002	11/10/2002	Status Check	PC (stamped rec'd 2/20/03)	Budget
SLM		2.0	2/12/2003		2/12/03 - KB sent inquiry as to status	
						Budget

I, Michelle White, as the primary custodian of patent records for FormFactor, Inc., do hereby certify that this is a true and correct copy of FormFactor's docket for U.S. Patent Application No. 09/539,287, Attorney Docket No. P48D1-US.

If you have any questions, please contact me at 925-785-7524.